

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
MARK FRIEDMAN  
7 JABOTINSKY ST.  
RAMAT GAN, ISRAEL 52520

REC'D 16 MAR 2005

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 3140-2		Date of mailing (day/month/year) <b>14 MAR 2005</b>	
International application No. PCT/IL04/00781		FOR FURTHER ACTION See paragraph 2 below	
International filing date (day/month/year) 29 August 2004 (29.08.2004)	Priority date (day/month/year) 12 January 2004 (12.01.2004)		
International Patent Classification (IPC) or both national classification and IPC IPC(7): G06F 15/173; H04L 12/56; G01R 31/08 and US Cl.: 709/238; 370/235			
Applicant NATIVE NETWORKS TECHNOLOGIES, LTD.			

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer John A. Follansbee Telephone No. 703-305-3900
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IL04/00781

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IL04/00781

**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-32</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-32</u>	NO
Industrial applicability (IA)	Claims <u>1-32</u>	YES
	Claims <u>NONE</u>	NO

**2. Citations and explanations:**

Claims 1-32 lack novelty under PCT Article 33(2) as being anticipated by Kloth et al (US 6,643,260 B1).

As to claims 1, 11, 23 and 32, Kloth discloses in a communication network, a method for resource bundling (col. 1, lines 9-16) comprising the steps of:

- (a) receiving, at a network policer, a plurality of data flows having different class of service (CoS) priority levels (plurality of service levels; different classes of data traffic; col. 1, lines 9-16; col. 4, lines 40-66), said data flows associated with a single user having an allocated bandwidth (col. 5, lines 10-14);
- (b) processing said data flows while sharing said allocated bandwidth between said different CoS priority levels in a prioritized manner (col. 7, lines 14-36; col. 8, lines 12-25); and
- (c) forwarding said processed data flows to the communication network (col. 3, lines 40-48).

As to claims 2, 4-7, 13-19 and 24-28, Kloth discloses each said data flow includes at least one data packet of a respective CoS priority level (plurality of service levels; different classes of data traffic; col. 1, lines 9-16; col. 4, lines 40-66), said at least one data packet having a data packet length, and wherein said step of processing includes, for each said data packet:

- i. providing a threshold associated with each said CoS priority level (col. 6, lines 26-38; col. 7, lines 51-65);
- ii. calculating a tentative credit value for said data packet (col. 5, line 54 - col. 6, line 7); and,
- iii. forming a forwarding decision based on a comparison between said tentative credit value and said threshold associated with said CoS priority level (col. 12, line 54 - col. 13, line 28).

As to claims 3, 12 and 30, Kloth discloses further discloses i. for accepted data packets of said plurality, forwarding all said accepted data packets regardless of their respective CoS priority level to the communications network (col.4, lines 24-66); and ii. for rejected data packets of said plurality (col. 4, lines 24-66), forwarding said rejected data packet to a lower level network policer for further processing (col. 7, line 14 - col. 8, line 25).

As to claims 8, 9, 20, 21 and 29, Kloth discloses further discloses setting said tentative credit value to equal said available credit value; marking said data packet with a color tag that defines a permitted rate for said data packet; and transmitting said color tagged data packet on the network (col. 1, lines 37-44).

As to claims 10 and 22, Kloth discloses processing includes processing of data flows using a computer implemented code (software; col. 10, lines 59-67; col. 11, lines 36-39).

As to claim 31, Kloth discloses said network is selected from the group consisting of an Ethernet network and metro Ethernet network (col.3, lines 54-55).

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